STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
E-Mail: siting.council@po.state.ct.us
Web Site: www.state.ct.us/csc/index.htm

September 6, 2002

Christopher B. Fisher, Esq.
Cuddy & Feder & Worby LLP
90 Maple Avenue
White Plains, NY 10601-5196

RE: **EM-AT&T-097-020823** - AT&T Wireless PCS, LLC d/b/a AT&T Wireless notice of intent to modify an existing telecommunications facility located at 8 Ferris Road, Newtown, Connecticut.

Dear Attorney Fisher:

At a public meeting held on September 5, 2002, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice received in our office on August 23, 2002. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

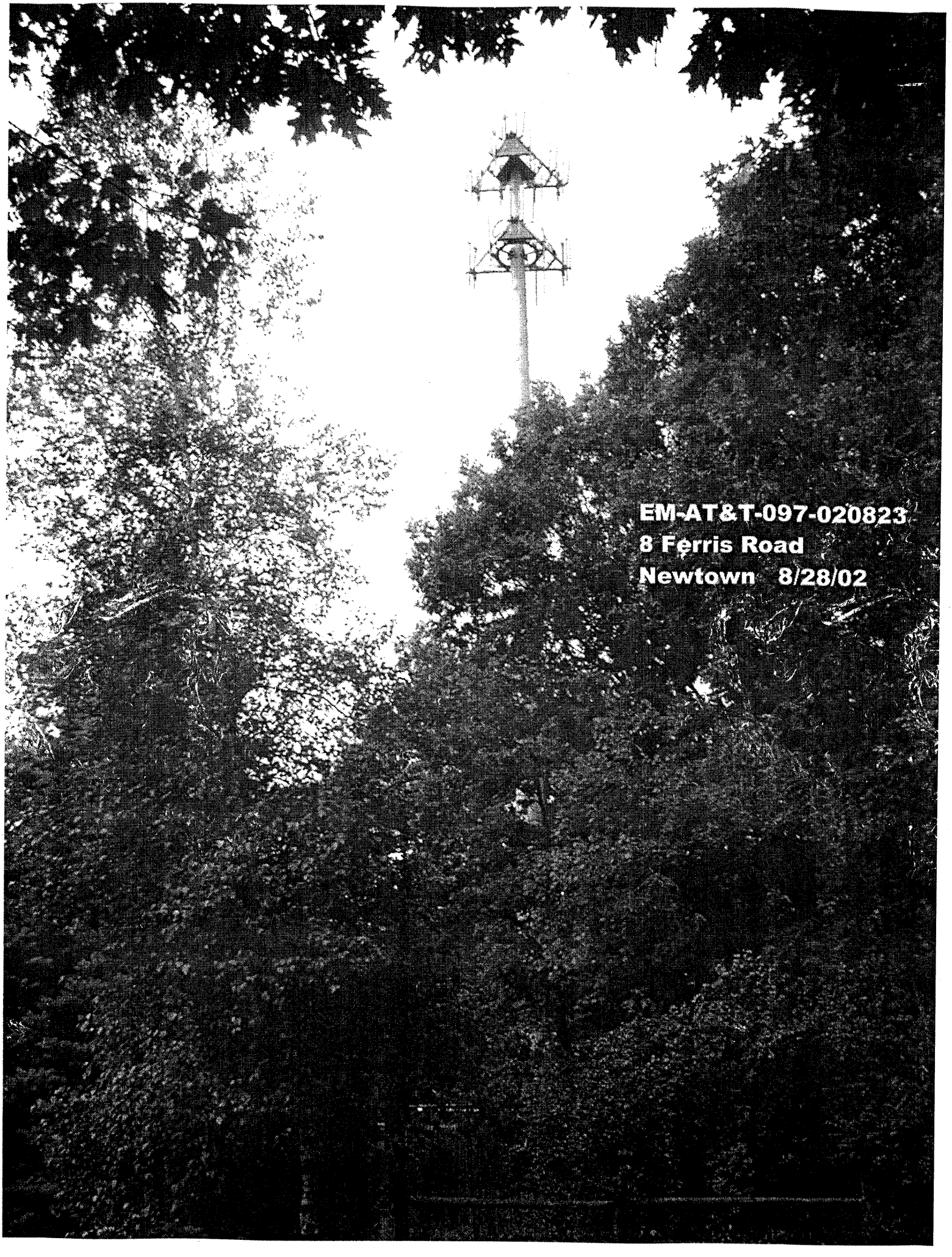
Very truly yours,

Mortimer A. Gelston
Chairman

MAG/laf

c: Honorable Herbert C. Rosenthal, First Selectman, Town of Newtown
Gary Frenette, Zoning Enforcement Officer, Town of Newtown
Thomas F. Flynn III, Nextel Communications
Julie M. Donaldson, Esq., Hurwitz & Sagarin LLC
Sandy M. Carter, Verizon Wireless

I:\siting\em\at&t\newtown\dc090502.doc


EM-AT&T-097-020823
8 Ferris Road
Newtown 8/28/02

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
E-Mail: siting.council@po.state.ct.us
Web Site: www.state.ct.us/csc/index.htm

August 26, 2002

Honorable Herbert C. Rosenthal
First Selectman
Town of Newtown
Town Hall
45 Main Street
Newtown, CT 06470

RE: **EM-AT&T-097-020823** – AT&T Wireless PCS, LLC d/b/a AT&T Wireless notice of intent to modify an existing telecommunications facility located at 8 Ferris Road, Newtown, Connecticut.

Dear Mr. Rosenthal:

The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

The Council will consider this item at the next meeting tentatively scheduled for September 5, 2002, at 1:30 p.m. in Hearing Room One, Ten Franklin Square, New Britain, Connecticut.

Please call me or inform the Council if you have any questions or comments regarding this proposal.

Thank you for your cooperation and consideration.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/slm

Enclosure: Notice of Intent

c: Gary Frenette, Zoning Enforcement Officer, Town of Newtown

NOTICE OF INTENT TO MODIFY AN EXISTING TELECOMMUNICATIONS FACILITY AT 8 FERRIS ROAD, NEWTOWN, CONNECTICUT

Pursuant to the Public Utility Environmental Standards Act, Connecticut General Statutes § 16-50g et. seq. ("PUESA"), and Sections 16-50j-72(b) of the Regulations of Connecticut State Agencies adopted pursuant to the PUESA, AT&T Wireless PCS, LLC d/b/a AT&T Wireless ("AT&T Wireless") hereby notifies the Connecticut Siting Council of its intent to modify an existing facility located at 8 Ferris Road, Newtown, Connecticut (the "Ferris Road Facility"), owned by Nextel Communications, ("Nextel"). AT&T Wireless and Nextel have agreed to share the use of the Ferris Road Facility, as detailed below.

The Ferris Road Facility

The Ferris Road Facility consists of an approximately one hundred twenty foot (120) foot monopole (the "Tower") and associated equipment currently being used for wireless communications by Nextel, Sprint PCS and Verizon.

AT&T Wireless' Facility

As shown on the enclosed plans prepared by ScienTel, including a site plan and tower elevation of the Ferris Road Facility, AT&T Wireless proposes shared use of the Facility by placing antennas on the Tower and equipment cabinets at grade needed to provide personal communications services ("PCS"). AT&T Wireless will install 6 panel antennas at approximately the 88 foot level of the Tower and associated equipment cabinets (2 proposed, 2 future, each 76"H x 30" W x 30" D) located on a concrete pad within the existing fenced compound. As evidenced in the structural evaluation prepared by Engineer Endeavors Incorporated, annexed hereto as Exhibit A, AT&T has confirmed that the Tower is structurally capable of supporting the addition of AT&T Wireless' antennas.

AT&T Wireless' Facility Constitutes An Exempt Modification

The proposed addition of AT&T Wireless' antennas and equipment to the Ferris Road Facility constitutes an exempt "modification" of an existing facility as defined in Connecticut General Statutes Section 16-50i(d) and Council regulations promulgated pursuant thereto. Addition of AT&T Wireless' antennas and equipment to the Tower will not result in an increase of the Tower's height nor extend the site boundaries. Further, there will be no increase in noise levels by six (6) decibels or more at the Tower site's boundary. As set forth in an Emissions Report prepared by Vishal Kataria, RF Engineer, annexed hereto as Exhibit B, the total radio frequency electromagnetic radiation power density at the Tower site's boundary will not be increased to or above the standard adopted by the Connecticut Department of Environmental Protection as set forth in Section 22a-162 of the Connecticut General

Statutes and MPE limits established by the Federal Communications Commission. For all the foregoing reasons, addition of AT&T Wireless' facility to the Tower constitutes an exempt modification which will not have a substantially adverse environmental effect.

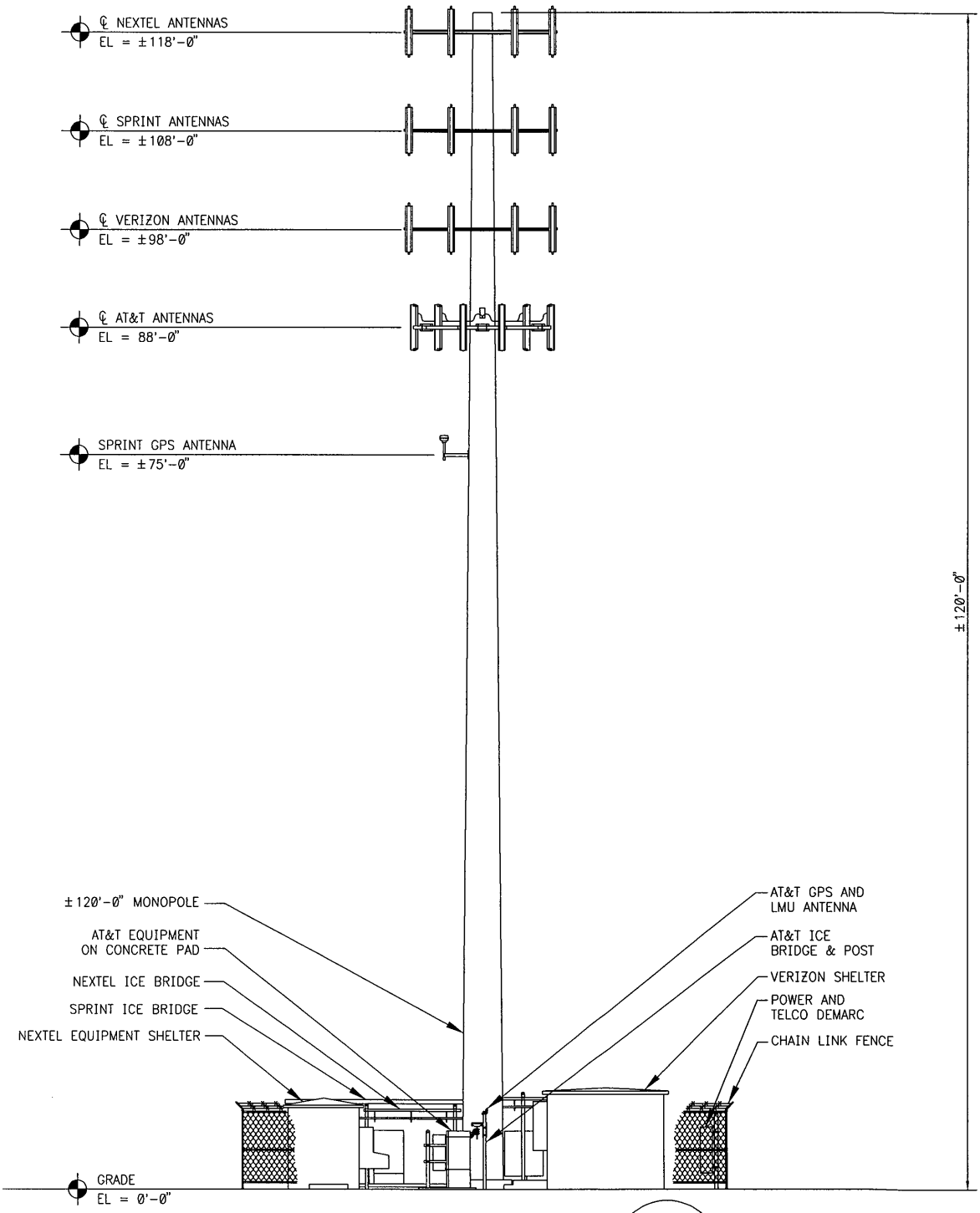
Conclusion

Accordingly, AT&T Wireless requests that the Connecticut Siting Council acknowledge that its proposed modification to the Ferris Road Facility meets the Council's exemption criteria.

Respectfully Submitted,

Christopher B. Fisher, Esq.
On behalf of AT&T Wireless

cc: Herbert C. Rosenthal, First Selectman, Town of Newtown
RJ Wetzel, Bechtel



SOUTH ELEVATION 1

SCALE: 1" = 15'-Ø" SC2

SCIENTEL.
THE BLEACHERY
143 WEST STREET
NEW MILFORD, CT. 06776
Tel: (860) 210-3020
Fax: (860) 210-3047

AT&T
AT&T WIRELESS PCS, LLC
149 EAST WATER STREET
SOUTH NORWALK, CT. 06855

DRAWING TITLE:
SITING COUNCIL

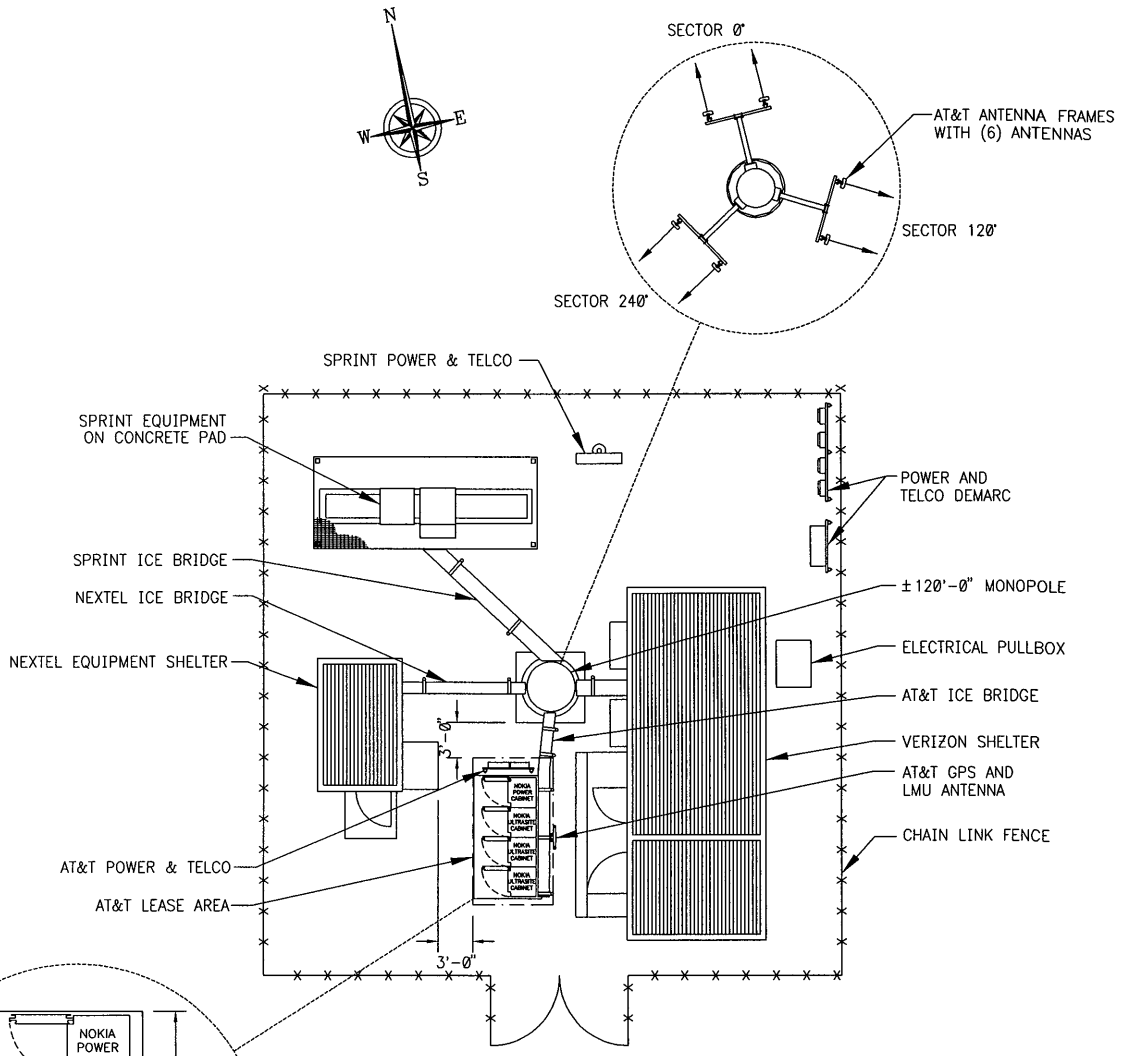
PROJECT INFORMATION:
NEWTOWN
CT-511
8 FERRIS ROAD
NEWTOWN, CT. 06470

PROPERTY OWNER:
NEXTEL COMMUNICATIONS
100 CORPORATE PLACE
ROCKY HILL, CT. 06067

DRAWING NO.
SC2

REVISION NO. A	DRAWN BY: JT
DATE ISSUED: 08/06/02	CHECKED BY: KW
SCALE: 1"= 15'-Ø"	APPROVED BY: SC
	SHEET NO. 2 OF 2
A/E PROJECT NO: 17447-0011	

NOTE:
EXISTING ANTENNAS NOT SHOWN FOR CLARITY.



SITE PLAN

SCALE: 1" = 15'-0"

1
SC1

SCIENTEL.
THE BLEACHERY
143 WEST STREET
NEW MILFORD, CT. 06776
Tel: (860) 210-3020
Fax: (860) 210-3047

AT&T
AT&T WIRELESS PCS, LLC
149 EAST WATER STREET
SOUTH NORWALK, CT. 06855

DRAWING TITLE:
SITING COUNCIL

PROJECT INFORMATION:
NEWTOWN
CT-511
8 FERRIS ROAD
NEWTOWN, CT. 06470

PROPERTY OWNER:
NEXTEL COMMUNICATIONS
100 CORPORATE PLACE
ROCKY HILL, CT. 06067

DRAWING NO.
SC1

REVISION NO. A	DRAWN BY: JT
DATE ISSUED: 08/06/02	CHECKED BY: KW
SCALE: 1" = 15'-0"	APPROVED BY: SC
	SHEET NO. 1 OF 2
A/E PROJECT NO: 17447-0011	

ENGINEERED
ENDEAVORS
INCORPORATED
The Experienced Point of View

ACTIVE MEMBER

July 10, 2002

ScienTech, Inc.
143 West Milford, Unit E
New Milford, CT 06776

Reference: Structural analysis of the existing 118-ft monopole in Newtown, CT.
EEI Project No. 10920 (original design #5189/GS51535).
ScienTel project No: 17447-0011.
AT&T site No. CT-511.1

Engineered Endeavors Incorporated (EEI) has evaluated the existing 118-ft monopole located in Newton, CT for the loads presented by ScienTel, Inc. The objective of the analysis was to determine if the monopole and foundation could structurally support the proposed antenna loading and meet the requirements of the TIA/EIA-222F, ASD Manual of Steel Construction, 2000 International Building Code, and American Concrete Institute Standard ACI 318-99.

The monopole was designed by EEI in July of 1999 and is depicted in drawing GS51535. The foundation was also designed by EEI and is depicted in drawing S5189-120.1.

Monopole. The monopole was evaluated for the following design loading:

- Nextel: (9) DB848H90 antennas on a low profile platforms @ 118'
- Sprint PCS: (6) DB980H90 antennas on a low profile platform @108'
- Verizon Wireless: (12) DB844H80 antennas on a low profile platform @98'
- AT&T: (6) Allgon 7250 @88' on a T-arm array
- (1) GPS antenna @75'

The monopole was evaluated per TIA/EIA-222F for wind velocity pressure of 85 ***mph*** as the original design. For more information on the loading refer to the EEI analysis cover page and calculations.

Results of the analysis.

Monopole. The results of the structural analysis demonstrate that the existing monopole, including all sections, base plate, and anchor bolts, is capable of supporting the design antenna loading as presented above. Note, that the monopole is loaded only to 66% its capacity.

If any of the antenna loadings are to be changed by either increasing the quantity of antennas, or antenna elevation, or installation of the additional appurtenances, or different antennas are currently installed on the pole, EEI has to be notified in order to evaluate the structural integrity of the monopole.

The monopole has three 5"x8" hand-holes at 99.5' and 89.5' elevation above the base plate which should be used for antenna cables. If additional hand-holes are required, they can be installed by following the proper procedure for field installation.

Foundation. The foundation for this pole was designed by EEI and is depicted in the drawing S5189-120.1. Table below provides the information on the initial foundation loads (as designed) and the new ones (based on this analysis). As the table shows, new base reactions are approximately 40% less than the initial ones.

	Initial foundation loading	New foundation loading
Moment, kip-ft	**2005.9**	**1398.0**
Shear, kips	**22.0**	**21.3**
Vertical, kips	**20.4**	**15.9**

EEI assumes that the foundation was installed in accordance to the design drawing, is in good conditions, and therefore, considers it to be capable of supporting the design loading as described above.

Closure. Based on the results of the analysis the existing steel monopole and foundation are capable of supporting the design antenna configuration as stated in this analysis.

This report is intended for use with regard to this specific structure discussed in general herein and any changes in antenna loading shall be brought to EEI's attention so we may determine how this may effect our conclusions and recommendations.

Yours truly,
Engineered Endeavors, Inc.

Boris S. Fayman, P.E.
Project Engineer

STATE OF CONNECTICUT
MICHAEL R. MOREL
No. 21220
LICENSED PROFESSIONAL ENGINEER
7/15/02

Michael R. Morel, P.E.
Vice President

Enclosure

Engineered Endeavors Incorporated
7610 Jenther Drive, Mentor OH 44060
Ph.(440)918-1101*Fax(440)918-1108*www.engend.com

RF Exposure Analysis for Proposed AT&T Wireless Antenna Facility

SITE ID: 913-010-511

AUG 14,2002

Prepared by AT&T Wireless Services, Inc.
Vishal Kataria **RF Engineer**

Table of Contents

1. Introduction

This report constitutes an RF exposure analysis for the proposed AT&T Wireless antenna facility to be located at *8 Farris Road, Newtown, CT 06470.* This analysis uses site-specific engineering data to determine the predicted levels of radio frequency (RF) electromagnetic energy in the vicinity of the proposed facility and compares those levels with the Maximum Permissible Exposure (MPE) limits established by the Federal Communications Commission.

2. Site Data

Site Name: ***Newtown-SR302***	
Number of simultaneously operating channels	12
Type of antenna	Allgon 7250.03
Power per channel (Watts ERP)	250.0 Watts
Height of antenna (feet AGL)	88.00 feet
Antenna Aperture Length	5 feet

3. RF Exposure Prediction

The following equations established by the FCC, in conjunction with the site data, were used to determine the levels of RF electromagnetic energy present in the vicinity of the proposed facility[1]:

$$PowerDensity = \frac{0.64 * N * EIRP(\theta)}{\pi * R^2} \ (mW/cm^2) \qquad \textit{Eq. 1-Far-field}$$

Where, ***N***= Number of channels, ***R***= distance in cm from the RC (Radiation Center) of antenna, and ***EIRP(θ)*** = The isotropic power expressed in milliwatts in the direction of prediction point. This is the correct equation for antennas which have their gain expressed in dBi, which is the usual case for the PCS bands.

$$PowerDensity = \frac{P_{in} / ch * N * 10^3}{2 * \pi * R * h * \alpha / 360} \ (mW/cm^2) \qquad \textit{Eq. 2-Near-field}$$

Where P_{in}/ch = Input power to antenna terminals in watts/ch, ***R*** = distance to center of radiation, ***h*** = aperture height in meters, α = 3 dB beam-width of horizontal pattern.

[1] RF exposure is measured and predicted in terms of power density in units of milliwatts (mW), a thousandth of a watt, or microwatts (μ W), a millionth of a watt, per square centimeter (cm^2). Data comparing predictive analysis with on site measurements has demonstrated that power density can be effectively predicted at given locations in the vicinity of a wireless antenna facility.

4. FCC Guidelines for Evaluating the Environmental Effects of RF Radiation

In 1985, the FCC established rules to regulate radio frequency (RF) exposure from FCC licensed antenna facilities. In 1996, the FCC updated these rules, which were further amended in August 1997 by a Second Memorandum Opinion and Order. These new rules represent a consensus of the federal agencies responsible for the protection of public health and the environment, including the Environmental Protection Agency (EPA), the Food and Drug Administration (FDA), the National Institute for Occupational Health and Safety (NIOSH), and the Occupational Safety and Health Administration (OSHA).

Under the laws that govern the delivery of wireless communications services in the United States, as amended by the Telecommunications Act of 1996, the FCC has exclusive jurisdiction over RF emissions from personal wireless antenna facilities, which include cellular, PCS, messaging and aviation sites. [2] Pursuant to its authority under federal law, the FCC has established rules to regulate the safety of emissions from these facilities.

5. Comparison with Standards

Exhibit A shows the levels of RF electromagnetic energy as one moves away from the antenna facility. As shown in Exhibit A, the maximum power density for AT&T system is 0.001235 mW/cm^2 at the antenna facility. Table 1 below shows the Maximum Permissible Exposure (MPE) limits established by the FCC. There are different MPE limits for public/uncontrolled and occupational/controlled environments.

Table 1: Maximum Permissible Exposure limits for RF radiation

Frequency	*Public/Uncontrolled*	*Occupational/controlled*	*Maximum power density at Accessible location*
Cellular	.580 mW/cm^2	2.9 mW/cm^2	0.001235 mW/cm^2
PCS	1 mW/cm^2	5 mW/cm^2	

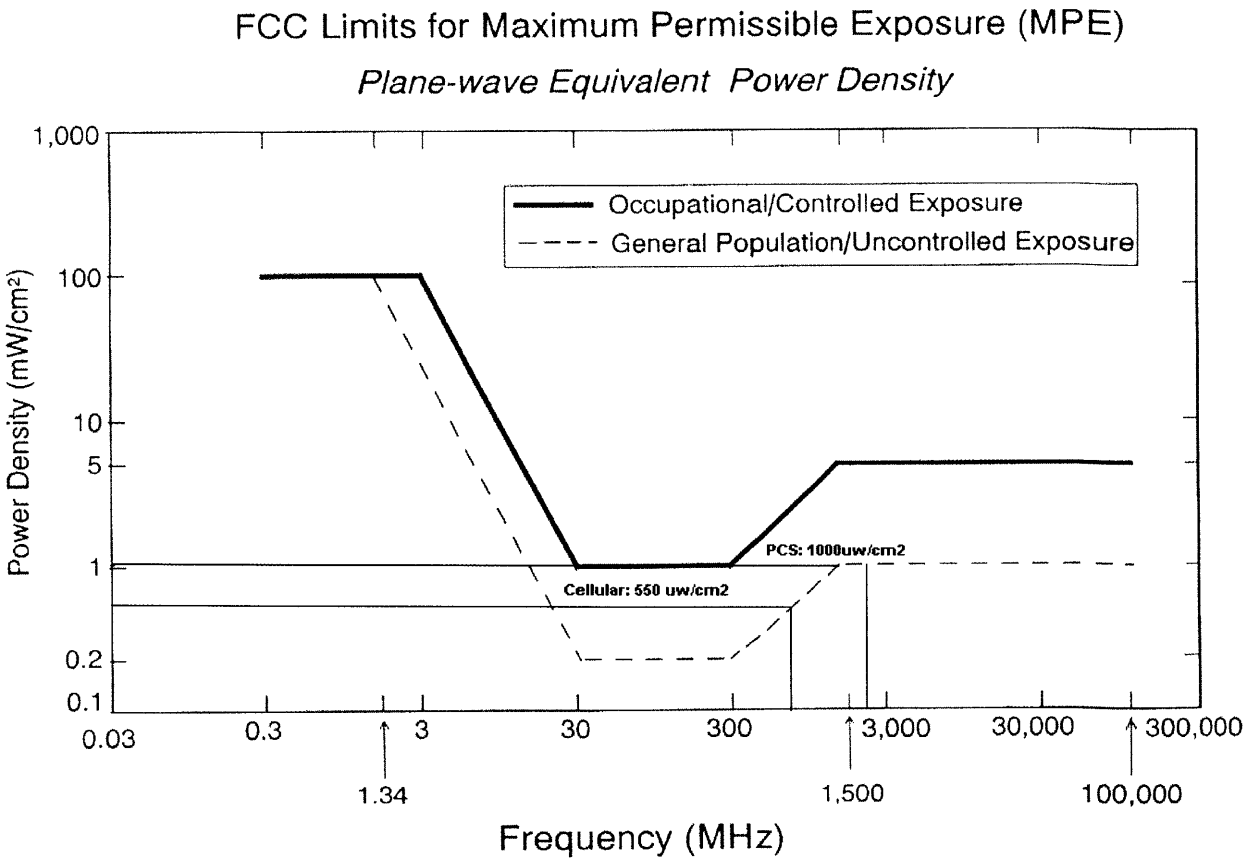
The maximum power density at the proposed facility represents only 0.12% of the public MPE limit for PCS frequencies. As other transmitters are also located at this site, I have taken the findings of the most recent Siting Council filing on this site, and added that exposure to ours as shown in Exhibit A. I find that the combined exposures are 20.50% of the Maximum Permissible Exposure for uncontrolled populations.

6. Conclusion

This analysis show that the maximum power density Percentage in accessible areas at this location is 20.45% , a level of RF energy that is below the Maximum Permissible Exposure limit established by the FCC.

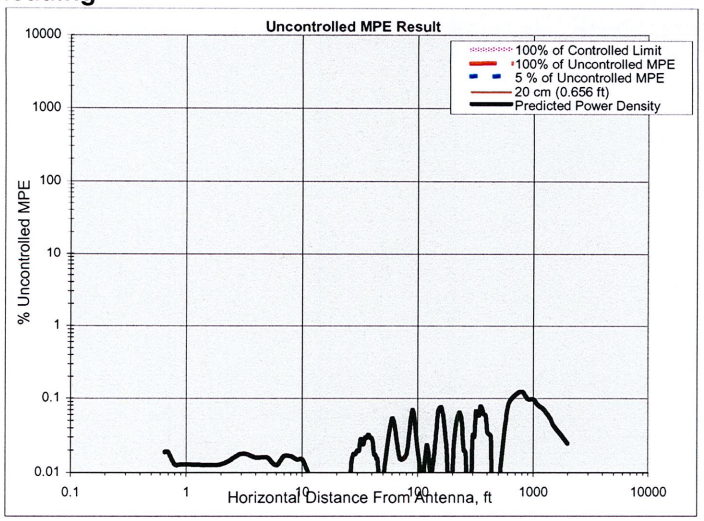
[2] 47 U.S. C. Section 332 (c) (7)(B)(iv) states that "[n]o State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions."

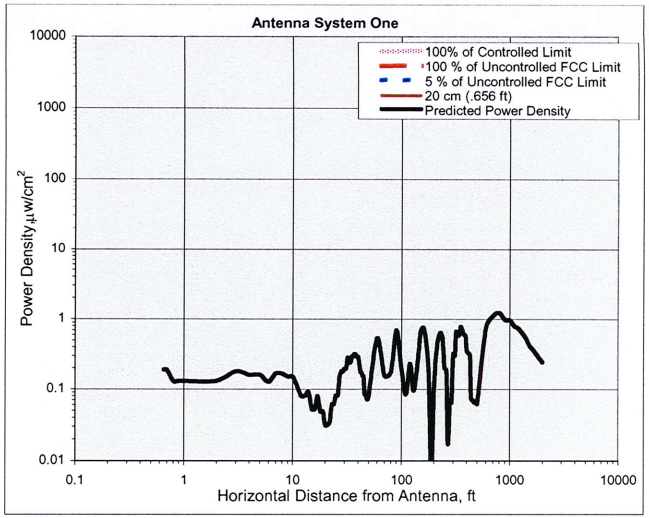
7. FCC Limits for Maximum Permissible Exposure



8. Exhibit A

Heading





Number of Antenna Systems: 1

Meets FCC Controlled Limits for The Antennas Systems.

Meets FCC Uncontrolled Limits for The Antenna Systems.

Meets 5% of FCC Uncontrolled Limits for The Antenna Systems.

No Further Maximum Permissible Exposure (MPE) Analysis Required.

	Power Density		@Horiz. Dist.
	mW/cm^2	% of limit	feet
Maximum Power Density =	0.001235	0.12	800.00
809.91 times lower than the MPE limit for uncontrolled environment			
Composite Power (ERP) =	3,000.00 Watts		

Site ID: 913-010-511
Site Name: Newtown-SR-302
Site Location: 8 Farris Road
Newtown,CT-06470

Performed By: Vishal Kataria

Date: 8/14/2002

Antenna System One

	units	Value
Frequency	MHz	1965.00
# of Channels	#	12
Max ERP/Ch	Watts	250.00
Max Pwr/Ch Into Ant.	Watts	5.86
(Center of Radiator)	feet	88.00
Calculation Point	feet	0.00
(above ground or		0.00
roof surface)		0.00
Antenna Model No.		Allgon 7250.03
Max Ant Gain	dBd	16.30
Down tilt	degrees	2.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	5.11
Ant HBW	degrees	65.00
Distance to Ant_{bottom}	feet	85.45
WOS?	Y/N?	n

Ant System ONE Owner: AT&T
Sector: 3
Azimuth: 0/120/240

Power Density Analysis for CT-511

Working with data from current filing:

Sl. No.	Carrier System	% MPE
1	Total % MPE for Verizon	12.25
2	Total % MPE for Sprint	4.13
3	Total % MPE for Nextel	4
	EXISTING TOTAL % MPE	20.38
4	% MPE FROM AT&T Wireless system	0.12
	TOTAL (PROPOSED) % MPE	20.5

Prepared by:

Vishal Kataria
RF Engineer,
Bechtel Telecommunications
AT&T Wireless Services, Inc.

9. For Further Information

Additional information about the environmental impact of RF energy from personal wireless antenna facilities can be obtained from the Federal Communications Commission:

Dr. Robert Cleveland
Federal Communications Commission
Office of Engineering and Technology
Washington, DC 20554

RF Safety Program: 202-418-2464
Internet address: rfsafety@fcc.gov
RF Safety Web Site: www.fcc.gov/oet/rfsafety

10. References

[1] The Communications Act of 1934, as amended by the Telecommunications Act of 1996, 47 U.S.C. Section 332 (c)(7)(B)(iv).

[2] *Guidelines for Evaluating the Environmental Effects of Radio frequency Radiation*, Notice of Proposed Rulemaking, ET Docket 93-62, 8 FCC Rcd 2849 (1993).

[3] *Guidelines for Evaluating the Environmental Effects of Radio frequency Radiation*, Report and Order, ET Docket 93-62, FCC 96-326, adopted August 1, 1996. 61 Federal Register 41006 (1996).

[4] *Guidelines for Evaluating the Environmental Effects of Radio frequency Radiation*, Second Memorandum Opinion and Order, ET Docket 93-62, adopted August 25, 1997.

[5] *Evaluating Compliance with FCC Guidelines for Human Exposure to Radio frequency Electromagnetic Fields*, OET Bulletin 65, August, 1997.